

**I CLAIM AS MY INVENTION:**

1. A magnetic resonance apparatus comprising:  
a magnetic resonance scanner unit having an examination space adapted to receive a region of an examination subject therein;  
a gradient coil unit movable in a displacement direction at least within the examination space;  
a component of the magnetic resonance scanner unit surrounding the examination space; and  
at least one pressurizable pillow disposed between the gradient coil unit and the component, said pillow having an internal pressure that is adjustable to mechanically fix the gradient coil unit relative to the component.
2. A magnetic resonance apparatus as claimed in claim 1 wherein said pillow has a thickness that is reducible, by reducing the internal pressure below ambient air pressure, to allow movement of the gradient coil unit relative to the component with the pillow disposed between the gradient coil unit and the component.
3. A magnetic resonance apparatus as claimed in claim 2 wherein said pillow is evacuable.
4. A magnetic resonance apparatus as claimed in claim 1 wherein said pillow mechanically fixes said gradient coil unit relative to said component when the internal pressure is substantially equal to ambient air pressure.
5. A magnetic resonance apparatus as claimed in claim 1 wherein said pillow mechanically fixes said gradient coil unit relative to said component when said internal pressure is above ambient air pressure.

6. A magnetic resonance apparatus as claimed in claim 1 wherein said pillow comprises a gastight outer skin.

7. A magnetic resonance apparatus as claimed in claim 6 wherein said outer skin has a gas connection with a valve for adjusting the internal pressure.

8. A magnetic resonance apparatus as claimed in claim 1 wherein said pillow is at least partially filled with material selected from the group consisting of at least one of a gas, a foam, a cellular material and a liquid.

9. A magnetic resonance apparatus as claimed in claim 1 wherein said pillow has an extent in said displacement direction substantially equally to an extent of the gradient coil unit in the displacement direction.

10. A magnetic resonance apparatus as claimed in claim 1 wherein said pillow is connected to said gradient coil unit.

11. A magnetic resonance apparatus as claimed in claim 10 wherein said pillow is glued to said gradient coil unit.

12. A magnetic resonance apparatus as claimed in claim 1 wherein said component has a shape allowing said gradient coil unit to be fixed against said component.

13. A magnetic resonance apparatus as claimed in claim 1 wherein said component comprises a whole-body antenna.

14. A magnetic resonance apparatus as claimed in claim 1 comprising a control unit connected to said pillow for adjusting the internal pressure.

15. A magnetic resonance apparatus as claimed in claim 1 wherein said component cylindrically limits said examination space.

16. A magnetic resonance apparatus as claimed in claim 15 wherein said gradient coil has a hollow-cylindrical shape.

17. A magnetic resonance apparatus as claimed in claim 1 comprising a movable support mechanism and a guide mechanism along which said support mechanism is movable, and wherein said gradient coil unit is movable on said guide mechanism.

18. A magnetic resonance apparatus as claimed in claim 1 wherein said examination space has at least two opening disposed opposite each other, and wherein said magnetic resonance apparatus comprises a movable support system movable into the examination space from a first of said openings, and wherein said gradient coil unit is movable into the examination space from a second of said openings.